

CLAIMS

What is claimed is:

1. A guard for covering the union of mating first and second shafts that are rotatable about and relatively telescopic along a shaft axis, the guard comprising:

an inner guard sleeve extending along the shaft axis about the first shaft;

5 an outer guard sleeve extending along the shaft axis about the second shaft radially outside of the inner guard sleeve; and

10 a center guard sleeve extending along the shaft axis radially between the inner and outer guard sleeves, the center guard sleeve being overlapped by the outer guard sleeve and overlapping the inner guard sleeve along the shaft axis and being biased axially toward one of the inner and outer guard sleeves so as to move axially in response to telescopic movement of the first and second shafts so as to bridge any gap between the ends of the inner and outer guard sleeves.

2. The guard of claim 1, further comprising a spring acting against the center guard sleeve and one of the inner and outer guard sleeves.

3. The guard of claim 2, wherein the spring acts against the inner guard sleeve to bias the center guard sleeve axially toward the outer guard sleeve.

4. The guard of claim 3, wherein the inner guard sleeve includes a radial end piece and the center guard sleeve includes a radial end piece, and wherein the spring is axially disposed between the end pieces.

5. The guard of claim 1, wherein the center guard sleeve is slideably linked to one of the inner and outer guard sleeves.

6. The guard of claim 5, wherein the center guard is linked in a tab and slot retention arrangement.
7. The guard of claim 6, wherein the center guard sleeve is linked to the inner guard sleeve and biased toward the outer guard sleeve.
8. The guard of claim 7, wherein the center guard sleeve includes a tab extending radially inward and received by an axially extending slot in the inner guard sleeve.
9. The guard of claim 8, wherein the tab has a section of a width greater than a width of the slot in the inner guard sleeve.
10. The guard of claim 8, wherein the tab is integral with the center guard sleeve.
11. The guard of claim 1, wherein the guard sleeve is co-axial with the shaft axis.
12. A guard for covering the union of two rotating shafts movable in telescoping relation through a travel distance along a shaft axis, the guard comprising: inner, center and outer guard sleeves disposed about the shafts along the shaft axis, the center guard sleeve being radially between the inner and outer guard sleeves in axially overlapping relation and being biased by a spring to maintain the overlap between the center guard sleeve and both of the inner and outer guard sleeves throughout the travel distance of the shafts.
13. The guard of claim 12, wherein the spring acts against the inner guard sleeve to bias the center guard sleeve axially toward the outer guard sleeve.

14. The guard of claim 13, wherein the inner guard sleeve includes a radial end piece and the center guard sleeve includes a radial end piece, and wherein the spring is axially disposed between the end pieces.

15. The guard of claim 12, wherein the center guard sleeve is slideably linked to one of the inner and outer guard sleeves.

16. The guard of claim 15, wherein the center guard is biased toward the outer guard sleeve and linked in a tab and slot retention arrangement to the inner guard sleeve.

17. The guard of claim 16, wherein the center guard sleeve includes an integral tab extending radially inward and received by an axially extending slot in the inner guard sleeve.

18. The guard of claim 17, wherein the tab has a section of a width greater than a width of the slot in the inner guard sleeve.

19. The guard of claim 12, wherein the guard sleeves are concentric with the shaft axis.